



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/360,542	07/26/1999	LUIS FELIPE CABRERA	2110	4320

7590 02/26/2002

ALBERT S MICHALIK  
MICHALIK AND WYLIE PLLC  
SUITE 103  
14645 BEL-RED ROAD  
BELLEVUE, WA 98007

EXAMINER

LE, DIEU MINH T

ART UNIT	PAPER NUMBER
	2184

DATE MAILED: 02/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

NM

## Office Action Summary

Application No.	Applicant(s)
09/360,542	CABRERA et al.
Examiner DIEU-MINH LE	Group Art Unit 2184

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

### Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE THREE (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

### Status

- Responsive to communication(s) filed on 02/28/00
- This action is FINAL.
- Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1.1; 453 O.G. 213.

### Disposition of Claims

- Claim(s) 1-55 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- Claim(s) \_\_\_\_\_ is/are allowed.
- Claim(s) 1-55 is/are rejected.
- Claim(s) \_\_\_\_\_ is/are objected to.
- Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

### Application Papers

- See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.
- The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- The specification is objected to by the Examiner.
- The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119 (a)-(d)

- Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- All  Some\*  None of the CERTIFIED copies of the priority documents have been received.
- received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

### Attachment(s)

- Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_  Interview Summary, PTO-413
- Notice of References Cited, PTO-892  Notice of Informal Patent Application, PTO-152
- Notice of Draftsperson's Patent Drawing Review, PTO-948  Other \_\_\_\_\_

Art Unit: 2184

**Part III DETAILED ACTION**

**Specification**

1. Claims 1-55 are presented for examination.

**Claim Rejections - 35 USC § 103**

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the

Art Unit: 2184

examiner to consider the applicability of 35 U.S.C. 103<sup>©</sup> and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGill, III et al. (US Patent 5,469,573 hereafter referred to as McGill) in view of Hugard et al. (US Patent 5,745,669 hereafter referred to as Hugard).

As per claim 1:

McGill substantially teaches the invention. McGill teaches:

- a method for backing up and restoring a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
- writing information/data to first medium [fig. 3, col. 2, lines 21-22];
- writing data files via the backup device to a second medium [fig. 3, col. 2, lines 22-23];
- reading information from the first medium [col. 2, lines 23-26];
- enabling the operation of the backup device [col. 2, lines 26-28];
- operating the backup device to restore the data files [col. 2, lines 28-31].

Art Unit: 2184

McGill does not explicitly teach:

- system state information.

However, McGill does disclose capability of:

- data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];

comprising:

- computer configuration data [col. 16, lines 6-15] including AUTOEXEC.BAT, CONFIG.SYS, SYSTEM.INI, etc... [col. 10, lines 6-22];

- configuration files and recovery tool files including \*.INI, \*.DRV, \*.SYS, \*.COM, \*.EXE, etc... [col. 12, lines 41-67].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made first, to realize McGill's computer system comprising failure

Art Unit: 2184

detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc..., and more specifically data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58], recovery configuration for the system [fig. 3, col. 4, lines 24-39] as being the system state information as claimed by Applicant since the system state or data restoring and recovering are used to recover data or constructing data which has been lost via power failure, system crash, viruses, catastrophic failure; second, one would and can modify the McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, failure detection and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc...to explicitly including computer configuration data [col. 16, lines 6-15] including AUTOEXEC.BAT, CONFIG.SYS, SYSTEM.INI, etc... [col. 10, lines 6-22] and configuration files and recovery tool files including \*.INI, \*.DRV, \*.SYS, \*.COM, \*.EXE, etc... [col. 12, lines 41-67] as taught by Hugard in supporting the system's error detecting and locating failure errors capabilities, error displaying capability, fault detection and signaling, error

Art Unit: 2184

tracking, monitoring, as well as comparison for data testing, a signature analysis, a fault testing, fault detection and signaling via backup and restoring capabilities within the computer system.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to provide the error handling within a error detection and recovery of computer data system, more specifically to the backup and restoring a computer system with a mechanism to enhance the computer system availability, performance throughput, and error free processing therein. It is further obvious because by utilizing this approach, the backup and restoring (i.e., error detection and recovery) system can be realized in:

- first, any error or failure occurred in a computer data system can be identified, detected, corrected via data comparison/checking, data receiving and executing, etc.. ;
- second, the data backup and restoring of the computer data system can operate with a high reliability and flexibility environment which will correctly provide optimum data availability;
- third, the system can be thoroughly managed in ensuring the entire fault detection system free of errors, improving the performance, and reducing the risk of data loss by utilizing data

Art Unit: 2184

backup and restoration via computer system state information or computer data configuration.

As per claims 2-4:

McGill substantially teaches the invention. McGill teaches:

- a method for backing up and restoring a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
  - data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];
  - writing **device driver** to the medium [col. 2, lines 43-47];
  - identifying a **restore program** [fig. 2, col. 4, lines 30-37].
    - writing **hard disk configuration information** [col. 2, lines 45-60]

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];
- comprising:

Art Unit: 2184

- configuration files and recovery tool files including  
\*.INI, \*.DRV, \*.SYS, \*.COM, \*.EXE, etc... [col. 12, lines 41-67].

As per claim 5:

McGill substantially teaches the invention. McGill teaches:

- a method for backing up and restoring a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
- data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];
- a **floppy disk medium** [col. 2, lines 40-42].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];
- comprising:
- configuration files and recovery tool files including \*.INI, \*.DRV, \*.SYS, \*.COM, \*.EXE, etc... [col. 12, lines 41-67].
- a **floppy disk medium** [col. 3, lines 37-45].

Art Unit: 2184

As per claim 6:

Even though McGill does not explicitly teach:

- a CD-ROM medium.

However, McGill discloses capabilities of:

- a removable media [col. 2, lines 40-42];
- an **optical disk drive medium** [col. 3, line 60].

Therefore, it would have been obvious to an ordinary skill in the art to realize the McGill's removable and optical disk drive medium as being the CD-ROM medium. This is because the optical disk drive's data is stored in a CD-ROM type medium and is read by optical light function. In addition, the CD-ROM feature is notoriously well known and widely used in computer arena. Generally speaking, every computer now-a-day has either external or internal CD-ROM capability therein.

As per claims 7-8:

McGill substantially teaches the invention. McGill teaches:

- a method for backing up and restoring a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:

Art Unit: 2184

- data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];
- **transmitting data over transmission medium** [fig. 1, col. 4, lines 1-5];
- **saving information to network files** [col. 6, lines 35-50].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];

comprising:

- saving computer configuration data capability [col. 7, lines 29-35].

As per claims 9-11:

McGill substantially teaches the invention. McGill teaches:

- a method for backing up and restoring a computer system [abstract, fig. 2, col. 1, lines 1-6] with a restoration comprising:

- data information including operating system files, system configuration files, device driver files, and any other

Art Unit: 2184

files necessary to properly configure and operate the workstation [col. 3, lines 51-58];

- a **hard drive medium** [col. 2, lines 58-59];
- configuring hard drive and copy files to the hard drive [col. 2, lines 58-67].

- hard drive including a boot volume and system volume [fig. 2, col. 2, line 58 through col. 3, line 5].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];

with a restoration comprising:

- a **hard drive medium** [col. 4, lines 1-5];
- a computer system boot from hard disk for recovery [col. 4, lines 48-60].

As per claim 12:

McGill does not explicitly address:

- registry data to a system registry.

However, McGill does disclose capability of:

Art Unit: 2184

- loading system configuration data, initializing the system configuration data, and re-initializing the system configuration data [col. 2, lines 18-47].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18]; comprising:  
- a checkpoint routine used for system recovery process [col. 5, lines 47-60];

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made first, to realize McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), and more specifically loading system configuration data, initializing the system configuration data, and re-initializing the system configuration data [col. 2, lines 18-47] as being the registry data to a system registry as claimed by Applicant since the system state or data restoring and recovering having the registry data are used to recover data or constructing data which has been lost via power failure, system crash, viruses, catastrophic failure; second, one would and can

Art Unit: 2184

modify the McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, failure detection and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc...to explicitly including a checkpoint routine used for system recovery process [col. 5, lines 47-60] as taught by Hugard in supporting the system's error detecting and locating failure errors capabilities, error displaying capability, fault detection and signaling, error tracking, monitoring, as well as comparison for data testing, a signature analysis, a fault testing, fault detection and signaling via backup and restoring capabilities within the computer system.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to provide the error handling within a error detection and recovery of computer data system, more specifically to the backup and restoring a computer system with a mechanism to enhance the computer system availability, performance throughput, and error free processing therein.

As per claims 13-14:

McGill substantially teaches the invention. McGill teaches:

Art Unit: 2184

- a method for backing up and restoring a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
- data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];
- a **tape drive medium** [col. 3, lines 59-60];
- a **hard drive medium** [col. 2, lines 58-59];
- configuring hard drive and copy files to the hard drive [col. 2, lines 58-67].
  - hard drive including a boot volume and system volume [fig. 2, col. 2, line 58 through col. 3, line 5].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18]; comprising:
  - configuration files and recovery tool files including \*.INI, \*.DRV, \*.SYS, \*.COM, \*.EXE, etc... [col. 12, lines 41-67].
  - a **tape drive medium** [fig. 2, col. 7, lines 28-45];
  - a **hard drive medium** [col. 4, lines 1-5].

Art Unit: 2184

As per claims 15-17:

McGill substantially teaches the invention. McGill teaches:

- a method for backing up and restoring a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
  - data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];
  - writing **device driver** to the medium [col. 2, lines 43-47];
  - identifying a **restore program** [fig. 2, col. 4, lines 30-37].
- writing **hard disk configuration information** [col. 2, lines 45-60].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18]; comprising:
  - configuration files and recovery tool files including \*.INI, \*.DRV, \*.SYS, \*.COM, \*.EXE, etc... [col. 12, lines 41-67].

Art Unit: 2184

As per claim 18:

McGill substantially teaches the invention. McGill teaches:

- a method for backing up and restoring a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
- collecting information/data including hard disk configuration [fig. 3, col. 2, lines 21-22 and col. 2, lines 58-67];
- recording (i.e., writing) data files a accessible medium [fig. 3, col. 2, lines 22-23];
- recording recovery information to the medium [col. 2, lines 23-31];

McGill does not explicitly teach:

- system state information.

However, McGill does disclose capability of:

- data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58].

In addition, Hugard explicitly teaches:

Art Unit: 2184

- a backup and restoring data configuration system

[abstract, col. 1, lines 10-18];

comprising:

- computer configuration data [col. 16, lines 6-15]

including AUTOEXEC.BAT, CONFIG.SYS, SYSTEM.INI, etc... [col. 10, lines 6-22];

- configuration files and recovery tool files including \*.INI, \*.DRV, \*.SYS, \*.COM, \*.EXE, etc... [col. 12, lines 41-67].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made first, to realize McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc..., and more specifically data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58], recovery configuration for the system [fig. 3, col. 4, lines 24-39] as being the system state information as claimed by Applicant since the system state or data restoring and recovering are used to recover data or constructing data which has been lost via power failure, system

Art Unit: 2184

crash, viruses, catastrophic failure; second, one would and can modify the McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, failure detection and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc...to explicitly including computer configuration data [col. 16, lines 6-15] including AUTOEXEC.BAT, CONFIG.SYS, SYSTEM.INI, etc... [col. 10, lines 6-22] and configuration files and recovery tool files including \*.INI, \*.DRV, \*.SYS, \*.COM, \*.EXE, etc... [col. 12, lines 41-67] as taught by Hugard in supporting the system's error detecting and locating failure errors capabilities, error displaying capability, fault detection and signaling, error tracking, monitoring, as well as comparison for data testing, a signature analysis, a fault testing, fault detection and signaling via backup and restoring capabilities within the computer system.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to provide the error handling within a error detection and recovery of computer data system, more specifically to the backup and restoring a computer system with a mechanism to enhance the computer system availability, performance throughput, and error

Art Unit: 2184

free processing therein. It is further obvious because by utilizing this approach, the backup and restoring (i.e., error detection and recovery) system can be realized in:

- first, any error or failure occurred in a computer data system can be identified, detected, corrected via data comparison/checking, data receiving and executing, etc.. ;

- second, the data backup and restoring of the computer data system can operate with a high reliability and flexibility environment which will correctly provide optimum data availability;

- third, the system can be thoroughly managed in ensuring the entire fault detection system free of errors, improving the performance, and reducing the risk of data loss by utilizing data backup and restoration via computer system state information or computer data configuration.

As per claim 19-20:

McGill teaches:

- a custom driver (removable driver) [col. 2, lines 40-42].

McGill does not explicitly address:

- registry data to a system registry.

Art Unit: 2184

However, McGill does disclose capability of:

- loading system configuration data, initializing the system configuration data, and re-initializing the system configuration data [col. 2, lines 18-47].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18]; comprising:
  - a checkpoint routine used for system recovery process [col. 5, lines 47-60].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made first, to realize McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), and more specifically loading system configuration data, initializing the system configuration data, and re-initializing the system configuration data [col. 2, lines 18-47] as being the registry data to a system registry as claimed by Applicant since the system state or data restoring and recovering having the registry data are used to recover data or constructing data which has been lost via power failure, system

Art Unit: 2184

crash, viruses, catastrophic failure; second, one would and can modify the McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, failure detection and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc...to explicitly including a checkpoint routine used for system recovery process [col. 5, lines 47-60] as taught by Hugard in supporting the system's error detecting and locating failure errors capabilities, error displaying capability, fault detection and signaling, error tracking, monitoring, as well as comparison for data testing, a signature analysis, a fault testing, fault detection and signaling via backup and restoring capabilities within the computer system.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to provide the error handling within a error detection and recovery of computer data system, more specifically to the backup and restoring a computer system with a mechanism to enhance the computer system availability, performance throughput, and error free processing therein.

As per claim 21-26:

Art Unit: 2184

McGill substantially teaches the invention. McGill teaches:

- a method for backing up and restoring a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
    - data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];
    - a **floppy disk medium** [col. 2, lines 40-42];
    - writing **device driver** to the medium [col. 2, lines 43-47];
    - identifying a **restore program** [fig. 2, col. 4, lines 30-37].
      - writing **hard disk configuration information** [col. 2, lines 45-60]
      - saving a list of instruction to execute (i.e., access control list) [col. 6, lines 35-50].
- In addition, Hugard explicitly teaches:
- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];
- comprising:

Art Unit: 2184

- configuration files and recovery tool files including \*.INI, \*.DRV, \*.SYS, \*.COM, \*.EXE, etc... [col. 12, lines 41-67].
- **a floppy disk medium** [col. 3, lines 37-45].

As per claims 27-28:

McGill substantially teaches the invention. McGill teaches:

- a method for restoring a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
- accessing information/data including hard disk configuration [fig. 3, col. 2, lines 21-22 and col. 2, lines 58-67];
- creating a restoration environment [fig. 3, col. 2, lines 22-31];
- executing recovery instruction information [col. 2, lines 23-31] (i.e., data information executing including operating system files, system configuration files, device driver files [col. 3, lines 51-58]).

McGill does not explicitly teach:

- system state information.

However, McGill does disclose capability of:

Art Unit: 2184

- data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];

comprising:

- computer configuration data [col. 16, lines 6-15] including AUTOEXEC.BAT, CONFIG.SYS, SYSTEM.INI, etc... [col. 10, lines 6-22];

- configuration files and recovery tool files including \*.INI, \*.DRV, \*.SYS, \*.COM, \*.EXE, etc... [col. 12, lines 41-67].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made first, to realize McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc..., and more specifically data information including operating system files, system configuration files, device driver files, and any

Art Unit: 2184

other files necessary to properly configure and operate the workstation [col. 3, lines 51-58], recovery configuration for the system [fig. 3, col. 4, lines 24-39] as being the system state information as claimed by Applicant since the system state or data restoring and recovering are used to recover data or constructing data which has been lost via power failure, system crash, viruses, catastrophic failure; second, one would and can modify the McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, failure detection and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc...to explicitly including computer configuration data [col. 16, lines 6-15] including AUTOEXEC.BAT, CONFIG.SYS, SYSTEM.INI, etc... [col. 10, lines 6-22] and configuration files and recovery tool files including \*.INI, \*.DRV, \*.SYS, \*.COM, \*.EXE, etc... [col. 12, lines 41-67] as taught by Hugard in supporting the system's error detecting and locating failure errors capabilities, error displaying capability, fault detection and signaling, error tracking, monitoring, as well as comparison for data testing, a signature analysis, a fault testing, fault detection and signaling via backup and restoring capabilities within the computer system.

Art Unit: 2184

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to provide the error handling within a error detection and recovery of computer data system, more specifically to the backup and restoring a computer system with a mechanism to enhance the computer system availability, performance throughput, and error free processing therein. It is further obvious because by utilizing this approach, the backup and restoring (i.e., error detection and recovery) system can be realized in:

- first, any error or failure occurred in a computer data system can be identified, detected, corrected via data comparison/checking, data receiving and executing, etc.. ;
- second, the data backup and restoring of the computer data system can operate with a high reliability and flexibility environment which will correctly provide optimum data availability;
- third, the system can be thoroughly managed in ensuring the entire fault detection system free of errors, improving the performance, and reducing the risk of data loss by utilizing data backup and restoration via computer system state information or computer data configuration.

As per claims 29-31:

Art Unit: 2184

McGill substantially teaches the invention. McGill teaches:

- a method for restoring a computer system [abstract, fig. 2, col. 1, lines 1-6] with a restoration comprising:
  - data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];
  - a **hard drive medium** [col. 2, lines 58-59];
  - configuring hard drive and copy files to the hard drive [col. 2, lines 58-67].
    - hard drive including a boot volume and system volume [fig. 2, col. 2, line 58 through col. 3, line 5]
    - a **floppy disk medium** [col. 2, lines 40-42].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];  
with a restoration comprising:
  - a **hard drive medium** [col. 4, lines 1-5];
  - configuration files and recovery tool files including \*.INI, \*.DRV, \*.SYS, \*.COM, \*.EXE, etc... [col. 12, lines 41-67].

Art Unit: 2184

- a floppy disk medium [col. 3, lines 37-45].

As per claims 32-34:

McGill substantially teaches the invention. McGill teaches:

- a method for restoring a computer system [abstract, fig. 2, col. 1, lines 1-6] with a restoration comprising:
  - a graphical window environment (data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation operated in a window environment (i.e., Win 3.x)) [col. 3, lines 41-50];
  - an OS/2 operation environment (i.e., a window driven) [col. 7, lines 43-53].

As per claims 35-38:

McGill substantially teaches the invention. McGill teaches:

- a method for backing up and restoring a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
  - data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];

Art Unit: 2184

- writing **device driver** to the medium [col. 2, lines 43-47];
- identifying a **restore program** [fig. 2, col. 4, lines 30-37].
- writing **hard disk configuration information** [col. 2, lines 45-60].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18]; comprising:
  - configuration files and recovery tool files including \*.INI, \*.DRV, \*.SYS, \*.COM, \*.EXE, etc... [col. 12, lines 41-67].

As per claims 39-41:

McGill substantially teaches the invention. McGill teaches:

- a system for backing up and restoring a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
  - a medium [fig. 2, col. 3, lines 58-65];
  - a backup component, collecting information/data including hard disk configuration [fig. 3, col. 2, lines 21-22 and col. 2, lines 58-67];

Art Unit: 2184

- recording (i.e., writing) data files a accessible medium [fig. 3, col. 2, lines 22-23];
- a restore component, restoring recovery information to the medium [col. 2, lines 23-31];
- configuring computer device with information [col. 2, lines 23-31] (i.e., data information executing including operating system files, system configuration files, device driver files [col. 3, lines 51-58]).

McGill does not explicitly teach:

- system state information.

However, McGill does disclose capability of:

- data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];

comprising:

Art Unit: 2184

- computer configuration data [col. 16, lines 6-15] including AUTOEXEC.BAT, CONFIG.SYS, SYSTEM.INI, etc... [col. 10, lines 6-22];
- configuration files and recovery tool files including \*.INI, \*.DRV, \*.SYS, \*.COM, \*.EXE, etc... [col. 12, lines 41-67].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made first, to realize McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc..., and more specifically data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58], recovery configuration for the system [fig. 3, col. 4, lines 24-39] as being the system state information as claimed by Applicant since the system state or data restoring and recovering are used to recover data or constructing data which has been lost via power failure, system crash, viruses, catastrophic failure; second, one would and can modify the McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e.,

Art Unit: 2184

data configurations), receiving, storing data, failure detection and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc...to explicitly including computer configuration data [col. 16, lines 6-15] including AUTOEXEC.BAT, CONFIG.SYS, SYSTEM.INI, etc... [col. 10, lines 6-22] and configuration files and recovery tool files including \*.INI, \*.DRV, \*.SYS, \*.COM, \*.EXE, etc... [col. 12, lines 41-67] as taught by Hugard in supporting the system's error detecting and locating failure errors capabilities, error displaying capability, fault detection and signaling, error tracking, monitoring, as well as comparison for data testing, a signature analysis, a fault testing, fault detection and signaling via backup and restoring capabilities within the computer system.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to provide the error handling within a error detection and recovery of computer data system, more specifically to the backup and restoring a computer system with a mechanism to enhance the computer system availability, performance throughput, and error free processing therein. It is further obvious because by utilizing this approach, the backup and restoring (i.e., error detection and recovery) system can be realized in:

Art Unit: 2184

- first, any error or failure occurred in a computer data system can be identified, detected, corrected via data comparison/checking, data receiving and executing, etc.. ;

- second, the data backup and restoring of the computer data system can operate with a high reliability and flexibility environment which will correctly provide optimum data availability;

- third, the system can be thoroughly managed in ensuring the entire fault detection system free of errors, improving the performance, and reducing the risk of data loss by utilizing data backup and restoration via computer system state information or computer data configuration.

As per claims 42-45 and 47:

McGill substantially teaches the invention. McGill teaches:

- a system for backing up and restoring a computer system

[abstract, fig. 2, col. 1, lines 1-6] comprising:

- data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];

- a **hard drive medium** [col. 2, lines 58-59];

Art Unit: 2184

- configuring hard drive and copy files to the hard drive [col. 2, lines 58-67].
- hard drive including a boot volume and system volume [fig. 2, col. 2, line 58 through col. 3, line 5]
- **a floppy disk medium** [col. 2, lines 40-42].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18];
- with a restoration comprising:
- a **hard drive medium** [col. 4, lines 1-5];
- configuration files and recovery tool files including \*.INI, \*.DRV, \*.SYS, \*.COM, \*.EXE, etc... [col. 12, lines 41-67].
- **a floppy disk medium** [col. 3, lines 37-45].

As per claim 46:

McGill does not explicitly address:

- system registry information to a computer system.

However, McGill does disclose capability of:

Art Unit: 2184

- loading system configuration data, initializing the system configuration data, and re-initializing the system configuration data [col. 2, lines 18-47].

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system [abstract, col. 1, lines 10-18]; comprising:
  - a checkpoint routine used for system recovery process [col. 5, lines 47-60];

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made first, to realize McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), and more specifically loading system configuration data, initializing the system configuration data, and re-initializing the system configuration data [col. 2, lines 18-47] as being the registry data to a system registry as claimed by Applicant since the system state or data restoring and recovering having the registry data are used to recover data or constructing data which has been lost via power failure, system crash, viruses, catastrophic failure; second, one would and can

Art Unit: 2184

modify the McGill's computer system comprising failure detection, backup and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, failure detection and recovery function, executing data parameter (i.e., data configurations), receiving, storing data, etc...to explicitly including a checkpoint routine used for system recovery process [col. 5, lines 47-60] as taught by Hugard in supporting the system's error detecting and locating failure errors capabilities, error displaying capability, fault detection and signaling, error tracking, monitoring, as well as comparison for data testing, a signature analysis, a fault testing, fault detection and signaling via backup and restoring capabilities within the computer system.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to provide the error handling within a error detection and recovery of computer data system, more specifically to the backup and restoring a computer system with a mechanism to enhance the computer system availability, performance throughput, and error free processing therein.

As per claims 48-55:

McGill substantially teaches the invention. McGill teaches:

Art Unit: 2184

- a system for backing up and restoring a computer system [abstract, fig. 2, col. 1, lines 1-6] comprising:
- writing information/data to first medium [fig. 3, col. 2, lines 21-22];
- writing data files via the backup device to a second medium [fig. 3, col. 2, lines 22-23];
- data information including operating system files, system configuration files, device driver files, and any other files necessary to properly configure and operate the workstation [col. 3, lines 51-58];
- installing **device driver** to the medium [col. 2, lines 43-47];
- a **restore program** [fig. 2, col. 4, lines 30-37].
- copy operating system files **hard disk drive** [fig. 3, col. 2, lines 45-60 and col. 5, lines 40-50]
- creating a restoration environment [fig. 3, col. 2, lines 22-31];
- executing recovery instruction information [col. 2, lines 23-31] (i.e., data information executing including operating system files, system configuration files, device driver files [col. 3, lines 51-58]).

Art Unit: 2184

In addition, Hugard explicitly teaches:

- a backup and restoring data configuration system  
[abstract, col. 1, lines 10-18];

comprising:

- computer configuration data [col. 16, lines 6-15]  
including AUTOEXEC.BAT, CONFIG.SYS, SYSTEM.INI, etc... [col.  
10, lines 6-22];  
- configuration files and recovery tool files including  
.INI, \*.DRV, \*.SYS, \*.COM, \*.EXE, etc... [col. 12, lines 41-  
67].

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. A shortened statutory period for response to this action is set to expire THREE (3) months, ZERO days from the date of this letter. Failure to respond within the period for response will cause the application to be abandoned. 35 U.S.C. 133.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dieu-Minh Le whose telephone number is (703) 305-9408. The examiner can

Art Unit: 2184

normally be reached on Monday-Thursday from 6:30 AM to 4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel, can be reached on (703) 305-9713. The fax phone number for this Group is (703) 746-7240.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 746-7239, (for formal communications intended for entry)

**Or:**

(703) 746-7240 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).



DIEU-MINH THAI LE  
PRIMARY EXAMINER  
ART UNIT 2184

DML

February 19, 2002